

प्राधिकार से प्रकाशित PUBLISHED BY AUTHORITY

to 39]

नई दिल्ली, शनिवार, सितम्बर 30, 1978

(अश्वन 8, 1900)

REGISTERED NO. D. CO. CRETARIAT

out de indi

lo. 391

NEW DELHI, SATURDAY, SEPTEMBER 30, 1978 (ASVINA 8, 1900)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके। Separate paging is given to this Part in order that it may be filed as a separate compilation.

## भाग III-खण्ड 2

## PART III—SECTION 2

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं श्रीर नोटिस Notifications and Notices issued by the Patent Office relating to Patents and Designs

## THE PATENT OFFICE

#### PATENTS AND DESIGNS

Calcutta, the 30th Septmeber 1978

PLICATION FOR PATENTS FILED AT THE HEAD OFFICE

he dates shown in crescent brackets are the dates claimed er Section 135 of the Act.

## 24th August, 1978.

- /Cal/78. Anstalt Mura. Apparatus for the production of carbon black.
- /Cal/78. Richter Gedeon Vegyeszeti Gyar RT. Process and equipment for the utilization of sludges containing organic impurities formed mainly as the byproduct of the communal sewage purification.
- /Cal/78. O. F. Larsen. A system for depositing sediment and/or protecting an installation on the floor of a body of water. (August 24, 1977). [Addition to No. 959/Cal/77].
- 'Cal/78. O. F. Larsen. A system for protection of an installation on the floor of a body of water. (August 24, 1977).
- /Cal/78. Somnath Mukherjee and Samir Dharchaudhuri. Programmable electrical assembly.
- Cal/78. Ruti-Te Strake B. V. Supply system for pneumatic weaving machine.
- 'Cal/78. Ruti-Te Strake B. V. Reed baulk unit.
- 'Cal/78. The Air Preheater Company, Inc. Rotor post. 7GI/78

25th August, 1978.

- 939/Cal/78. DSO "Pharmachim". Benzoyl derivatives of 1-phenyl-3-methylpyrazolon-5.
- 940/Cal/78. Outokumpu OY. A process for producing pellets of predetermined size from a finely-divided material and an apparatus for carrying out the process:
- 941/Cal/78. W. Glatt. Fluidized bed apparatus.

## 26th August, 1978.

- 942/Cal/78. Societe Minemet Recherche. Process for the recovery of uranium contained in phosphated solutions.
- 943/Cal/78. Allware Agencies Limited. Slipping clutch mechanism.

## 28th August, 1978.

- 944/Cal/78. V. V. Rumyantsev, L. K. Vladimirova and R. A. Lauenburg. Dynamoelectric machine.
- 945/Cal/78. Tractel Firfor India Private Limited. Transfer trollies for carrying and shifting aerating machine during composting.

# 29th August, 1978.

- 946/Cal/78. Macgregor International S.A. A gripping and skidding apparatus.
- 947/Cal/78. E. P. Palomer. Sustaining and rotating mechanism of multiple applications.
- 948/Cal/78. "December 4" Drotmuvek. Steel-cored aluminium cable, especially for electric power conduction and process for producing such cable.

#### 30th August, 1978.

- 949/Cal/78. F. Hoffmann-La Roche & Co. Aktiengesellschaft. Imidazole derivatives.
- 950/Cal/78. M. L. Aviation Company Limited, Ejector release unit. (September 26, 1977).
- 951/Cal/78. F. W. Franz Schob. Process for the production of metallised iron and apparatus therefor.
- 952/Cal/78. Sciaky Bros, Inc. Method and apparatus for heat treating.
- 953/Cal/78. American Cyanamid Company. Preparation of improved electrochromic devices.
- 954/Cal/78. Gosudarstvenny Nauchno-Issledovatelsky Institut Mashinovedenia. Method for balancing rotors and apparatus for effecting same,

# APPLICATION FOR PATENTS FILED AT THE (DELHI BRANCH)

## 7th August, 1978.

- 582/Dcl/78. W. L. Sherwood. Continuous metal melting, withdrawal and discharge from rotory furnaces.
- 583/Del/78. Council of Scientific and Industrial Research.
  A process for the preparation of subdermal implants as long acting controlled release drug delivery systems for anti-bacterial and antiparasitic drugs.

#### 8th August, 1978.

- 584/Del/78. Celfil Company Establishment. Material web for the manufacture of filter rods for tobacco products and apparatus and process for producing such web.
- 585/Dcl/78, A. O. Dye., and D. H. Littlechild. Inlet valve assembly for internal cobustion engines.
- 586/Del/78. Armco, Inc. Method of stabilizing viscosity and increasing concentration of aqueous magnesia slurry.
- 587/Del/78. E. A. Gastrock. Sight glass and sampling system and apparatus for interconnecting tanks employed in an in-line liquid process. [Divisional date December 24, 1976]
- 588/Del/78. Council of Scientific and Industrial Research. Magnetic replication solution.
- 589/Del/78. Council of Scientific and Industrial Research.
  Multigas sampling kit.

#### 9th August, 1978.

590/Del/78. Dr. A. S. Bapna. Improved laryngoscope with lateral slots.

## 10th August, 1978.

- 591/Del/78. Bayer Aktiengesellschaft. Process for the preparation of 1-amino-4-bromoanthraquinone-2-sulphonic acid.
- 592/De1/78. Bayer Aktiengesellschaft. Process for separating off 1-amino-4-bromoanthraquinone-2-sulphonic acid.
- 593/Del/78. Bayer Aktiongesellschaft. Process for the preparation of 1-amino-4-bromoanthraquinone-2-sulphonic acid.
- 594/Del/78. G. D. Societa Per Azioni. Device for folding blanks of sheet material in machines for packaging articles particularly cigarettes, into hingedlid packets,

- 595/Del/78. Imi Kynoch Limited. (Formerly Imperial Met Industries (Kynoch) Limited). A method producing a primary explosive for a detonate (August 16, 1977).
- 596/Del/78. Council of Scientific and Industrial Researc
  A manually-operated/power operated intensifi
  for filling compressed air into light-weight pri
  sure bottles/cylinders (aush as those associatwith breathing apparatus sets used by the fi
  service/mines rescue personnel, scuba divers etc
  used in irrespirable atmospheres or under wate.
- 597/Del/78. Council of Scientific and Industrial Researc Improvements in or relating to knitting machine
- 598/Del/78. Council of Scientific and Industrial Research Steel friction prop.

## 11th August, 1978.

- 599/Del/78. Sujoy Kumar Guha. Artificial leg thigh mec' nism for sitting crosslegged without hand ma. pulations.
- 600/Del/78. Sujoy Kumar Guha. Ankle mechanism whl permits squatting when fitted either to above ke or below knee leg prosthesis.
- 601/Del/78. Delhi Cloth & General Mills Co. Ltd. Improments in or relating to the manufacture of met lic anodes for the electrolytic cells particula for use in the electrolysis of aqueous sodit chloride solutions.
- 602/Del/78. Societe De Paris ET DU Rhone. Sta motor for an internal combustion engine.
- 603/Del/78. M/s. Rogers Corporation. High density sulating board and method of manufacture the of. [Divisional date.]

## 14th August, 1978.

- 604/Del/78. The Director, Central Council for Research Indian Medicine and Homoeopathy. A proc for the preparation of 9, 13 epoxy-6 β-hydro. 8 α labdane-16, 15:19, 20-diolactone.
- 605/Del/78. Waggonfabrik Uerdingen A.G. Suspension raway.
- 606/Del/78. Waggonfabrik Uerdingen A.G. Points for track suspension rail vehicle.
- 607/Del/78. R. S. Hoon. Improved device for the aspition of samples or diluting fluids for haema logical, biochemical or other diagnostic invegations.
- 608/Del/78. Union Carbide Corporation. Improved our means for vapor liquid contacting tray.

#### 16th August, 1978.

- 609/Del/78. International Bio-Medical Industries, Inc. Di nostic apparatus.
- 610/Del/78. Aluminum Company of America. Device damping vibration of suspended conductor.
- 611/Del/78. Mr. B. L. Mittal. A flash tank,
- 612/Del/78. Mr. B. L. Mittal. A clarifler.

## 17th August, 1978.

613/Del/78. The Director tute of India. Sium carbonate July 17, 1978].

General, Cement Research In A process for separating mag from dolomite. [Divisional d

## 18th August, 1978.

614/Del/78. Yodha Udyog. A nut cracker,

#### ALTERATION OF DATE

:5345. 171/Cal/76 Ante-dated May 21, 1973.

15368. 1/Mas/77. Post-dated 17th March, 1978.

5389. 24/Cal/76 Ante-dated 31st December, 1973.

#### COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in the posing the grant of patents of any of the application conrued may at any time within four months of the drte of s issue or on form 14 prescribed under the Patent Rules, 72 before the expiry of the said period of four months ren notice to the Controller of Patents at the appropriate lee as indicated in respect or each application, on the presbed form 15 of each opposition. The written statement of position should be filed along with the said notice or without month from its date as prescribed in Rule 35 of the tents Rules, 1972.

The classifications given below in respect of each specificanare accrding to Indian Classification and International

A limited number of printed copies of the specifications ed below will be available for sale from the Government India, Book Depot 8, Kiran Shankar Ray Road, Calcutta due Course. The price of each specification is Rs. 2/-stage extra is sent out of India) Requisition for the supply the printed specifications should be accompanies by the mber of the specifications as shown in the following list. Typed or photo copies of the specifications together with photo copies of the drawings, if any can be supplied by Patent Office, Calcutta on payment of the prescribed ying charges which may be assertained on application to to Office.

ASS 69A.

145338.

Cl.-H01h 1/00.

MPROVEMENTS IN OR RELATING TO ELECTRI-I. SWITCHGEAR.

'pplicant: AKTIEBOLAGET FERITUS, OF KUNGSGAN 19, ENKOPING, SWEDEN.

nventor: FREDERIK GUSTAFSON.

.pplication No. 256/Cal/75 filed February 12, 1975.

ppropriate office for opposition Proceedings (Rule 4, into Rules, 1972) Patent Office, Calcutta.

#### 6 Claims,

contact system for at least one pole of single pole or ti-pole electrical switch year, comprising a movable conmember and a fixed contact member, one contact member prising a resiliently mounted contact part and a rigid resilient part, wherein the rigid non-resilient contact is formed with at least one portion disposed substantially ellel to the resiliently mounted contact part and in a e containing the longitudinal axis along which the iently mounted contact part is resiliently movable at a ll distance from the said one portion, the resiliently nted contact part being pivotally connected in series with end of the rigid non-resilient contact part, and wherese other end of the rigid non-resilient part extends away the said one portion at substantially a right angle o, the resiliently mounted contact part being disposed ide the said angle.

SS 127H.

145339.

Cl.-F16h 21/00, 35/00.

4PROVEMENTS IN OR RELATING TO TOGGLE JHANISMS.

Applicant: AKTIEBOLAGET PERITUS, OF KUNGS-GATAN 19, ENKOPING, SWEDEN.

Inventor: FREDERIK GUSTAFSON.

Application No. 257/Cal/75 filed February 12, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 Claims.

A toggle mechanism comprising an element movable between two end positions; a drive member rigidly mounted on a rotatable operating shaft and slidably engaging one end of a spring lin; an operating link disposed for movement with a toggle action together with the spring link between two end positions, the element being coupled to the operating link tree pivot point of the operating link being separate from the operating shaft and the other end of the spring link being mounted on the operating link; and a linking mechanism which is coupled in parallel with the spring link and which comprises a first link which is coupled at one end to the operating link, a second link, a pivotal connection between one end of said second link and the other end of said first link, and a coupling between the other end of said second link and said drive link, the linking mechanism being disposed to be guidably moved between two end positions upon rotation of the operating shaft, the pivotal connection between said first and second links being movable along a fixed guide, and said coupling at said other end of said second link being movable between two bearing surfaces of a guide provided in said drive member.

CLASS 50Ea.

145340.

Int. Cl.-F25b 19/00.

COLD-GAS COMPRESSION/EXPANSION REFRIGERATOR.

Applicant: N. V. PHILIPS' GLOFILAMPENFABRIKEN, AT EMMASINGEL, EINDHOVEN, NETHERLANDS.

Inventor: JAN MULDER.

Application No. 761/Cal/75 filed April 15, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims.

A cold-gas compression/expansion refrigerator comprising a working space which is formed inside at least one cylinder and in which a working medium performs a thermo-dynamic cycle, the said working space comprising a compression space of higher mean temperature during operation and an expansion space of lower mean temperature during operation, the said spaces communicating with each other via heat exchangers, including a regenerator, the working surface of a piston which is coupled to a drive varying the volume of the compression space during operation so as to generate pressure variations in the working medium, one working surface of a displacer which is reciprocatable at a phase difference with respect to the piston varying the volume of the expansion space and the other working surface thereof varying the volume of the compression space in response to the pressure variation characterized in that the piston has an reciprocating electro-dynamic drive comprising an armature coil which is coupled to the piston and which is supplied during operation with an alternating current having a frequency fo, the said armature coil being reciprocatable in a permanent magnetic field, produced by a magnetic circuit, under the influence of Lorentz exerted on the armature coil, the system formed by piston/armature coil-assembly and working medium resonating during operation at a resonant frequency of which at least substantially corresponds

to the supply current (A.C.) frequency fo and which statisfles the relation:

$$\begin{cases}
\sqrt{\frac{S^2. P_m}{M. T_0 \left\{ \frac{1}{2^c} \cdot \frac{V_e}{T_c} + \frac{1}{2^c} \cdot \frac{V_e}{T_c} + \sum_{i=1}^{m} \frac{V_{wi}}{T_{wi}} \right\}}
\end{cases}$$

in which

S = working surface of the piston

 $P_m =$  mean working medium pressure in the working space of the machine

M = total mass of the piston/armature coil-assembly

T<sub>1</sub> = ambient temperature in degrees Kelvin

 $X_c = \frac{C_p}{C_v c}$  specific heat at constant pressure of the working medium in the compression space

 $V_c = volume$  of the compresion space

T<sub>c</sub> = mean operating temperature in degrees Kelvin of the working medium in the compression space

$$X_c = \frac{C_p}{C_v} = \frac{\text{specific heat at constant pressure}}{\text{specific heat at constant volume}}$$
 of the

working medium in the expansion space

V<sub>e</sub> = volume of the expansion space

T<sub>e</sub> = mean operating temperature in degrees Kelvin of the working medium in the expansion space

Vwi = the working medium volume of the i thheat exchanger

Twi =the mean operating temperature in degrees Kelvin of the working medium in the ith heat exchanger

n = total number of heat exchangers.

CLASS 50D & 196C.

145341.

Int. Cl.-F24f 5/00.

SPRINGS BJAS FOR A DAMPER DOOR OF AN AIR CONDITIONING UNIT.

Applicant: CARRER CORPORATION, AT SYRACUSE, NEW YORK, UNITED STATES OF AMERICA.

Inventors: RAYMOND JOSEPH MURNANE AND THEODORE SEELEY BOLTON.

Application No. 1256/Cal/75 filed June 25, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 Claims.

In an air conditioning unit having a casing, a partition dividing the unit into an evaporator section and a condenser section, and a port extending through said partition for enabling the flow of air between the evaporator section and the condenser section, apparatus for selectively opening and closing said port, said apparatus comprising a door dimensioned to cover said port, means for mounting said door for pivotal movement about an axis between port opening and port closing positions, and an open-ended leaf spring for biasing said door to the port closing position, one end of said spring being attached to said partition on one side of said axis and the other end of said spring being attached to said door on the opposite side of said axis, the line of force of said spring extending between the ends of said spring and said spring surrounding said axis when said door is shut and said line of force shifting toward said axis as said door

pivots toward the port opening position, whereby said idecreases from a maximum value as said door is moved fithe port closing towards the port opening position.

CLASS 173B.

145

Int. Cl.-B05b 1/00,

A WATER SUPPLYING DEVICE FOR AN COOLER.

Applicant & Inventor: RAM NARAIN KHER, OF F. DEFENCE COLONY, NEW DELHI-24, INDIA.

Application No. 1786/Cal/75 filed September 17, 197

Appropriate office for opposition Proceedings (Rul-Patents Rules, 1972) Patent Office, Delhi Branch.

#### 7 Claims.

A water supplying device for supplying water to an cooler comprising a discharge chamber mounted on the of the water chamber of said air cooler, an opening preed in said discharge chamber for allowing water from water chamber to flow into the discharge chamber, discharge chamber being open at the top, a rotatable partly disposed within said chamber, at least one ani groove providing on the periphery of said disc and such upon rotation of the disc a discharge of water in the of a sparay is provided.

CLASS 119B & D & Fa.

14

Int. Cl.-D03d 47/40.

A SELVAGE FORMING DEVICE FOR A WEAV LOOM.

Applicant: RUTI-TE STRAKE B.V., OF INDUST WEG 7. DEURNE, THE NETHERLANDS.

Inventor: CORNELIS VAN DONK.

Application No. 3284/Cal/75 filed December 24, 19

Appropriate office for opposition Proceedings (Ru Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims.

A selvage forming device for a weaving machine, device comprising a frame adapted to be connected heald shaft of the weaving loom and adapted to guide more outer warp threads, at least two needles being me in said frame and extending substantially in a plant pendicular to the plane of the fabric for guiding be threads to be interlaced with said outer warp thread the weft threads, said needles being adapted to recip in the weft direction one in counterphase with respect other and in synchronism with the heald shaft move characterized in that the frame comprises two rocking adapted to be positioned one below the other in a perpendicular to that of the warp threads, each piece or a needle of a co-operating pair of needles, in which the rocking pieces is secured to an actuating arm proutwardly in the said vertical plane, the rocking piec operating such that a movement imparted by the lever rocking piece secured thereto involves a corresponding ment of the other rocking piece in the opposite directif frame being further provided with one or more pawires adapted to be kept taut for guiding the said threads(s) therebetween.

CLASS 205L.

Int. Cl.-B60c 5/00.

TIRE BUFFING MACHINE BLADES HAVING DISSIPATION MEANS.

Applicant: B & J MANUFACTURING COMPANY, OF P.O. BOX 325 GLENWOOD, ILLINOIS 60425, UNITED STATES OF AMERICA.

Inventor: WAYNE EMIL JENSEN.

Application No. 630/Cal/76 filed April 13, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 15 Claims.

A replaceable blade for the rotating hub of a tire buffing machine comprising a sheet metal member having an outer working edge portion and an inner generally planar mounting portion by which the blade is removably fixed to the hub with its outer working edge portion protruding beyond the hub periphery, said working edge portion comprising one or more teeth having a leading edge which attacks the tire surface in rotation of the hub during operation of the buffing machine to remove material therefrom and a trailing edge therebehind, the working edge portion being characterized by an opening extending transversely through the blade adjacent the base of the tooth or teeth intermediate the leading and trailing edge thereof and outwardly of the inner planar mounting portion of the blade, said opening collecting air in rotation of the hub and enforcing its circulation immediately behind the cutting action of the tooth or teeth and across the hub periphery to dissipate heat as it is generated in the teeth and material build up on the hub periphery about the blade teeth in the burring act.

CLASS 1A & 27-J.

145345.

Int. Cl.-E04b 1/00.

FIRE-RETARDANT ADHESIVE FOR JOINING TOGETHER ELEMENTS OF A PLASTIC STRUCTURE.

Applicant: AUTOMATED CONSTRUCTION INDUSTRIES, INC, OF 1635 SOUTH 43RD AVENUE PHOENIX, ARIZONA 85005, UNITED STATES OF AMERICA.

Inventor: JOHN LORIN BOURDO.

Application No. 1071/Cal/76 filed June 17, 1976.

Divisional date May 21, 1973(1181/Cal/73).

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims.

A fire retardant adhesive for joining together the elements of a plastics structure which comprises:

a major portion of hardenable polyester for fusing the structural elements together;

an inert filler for thickening the hardenable polyester and for preventing running of the hardenable polyeter during application; and

a second inert filler for additionally thickening the hardenable polyester and for improving the fire retardation of the adhesive.

CLASS 129A.

145346.

Int. Cl.-B21d 5/00.

BENDING TOOL.

Applicant: HAEMMERLE AG MASCHINENFABRIK OF CH-4800 ZOFINGEN, SWITZERLAND.

Inventors: EDUARD ALEXANDER HAENNI AND VACLAV ZBORNIK.

Application No. 1087/Cal/76 filed June 19, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 16 Claims.

A bending tool for the bending of sheet metal comprising a bending bar connected to the ram of a bending press and a matrix cooperating with said bending bar, said matrix being provided with a longitudinal groove on the side facing said bending bar, the groove determining by its shape, icits width and depth, the bending angle to be achieved in the sheet metal, whereby at least one of the limiting planes of the groove is displaceable in its position relative to the other limiting planes of the groove to change the shape of the groove and thereby the angle to be bent in the sheet metal.

CLASS 140B<sub>1</sub>.

145347.

Int. Cl.-C10m 1/20.

A PROCESS FOR THE PRODUCTION OF AN ADDITIVE FOR LUBRICATING OILS AND RELATED PRODUCT.

Applicant: LIQUICHIMCA ROBASSOMERO S.P.A., OF VIA-C. GOLDONI 10, MILAN, ITALY AND VSESOI-UZNIJ NAUCNIJ ISSLEDOVATELKJ INSTITUT PO PERERABOTKE NEFTI VNIINP, OF ULITSA AVIAMOTORNAYA 6-MOSCOW, USSR.

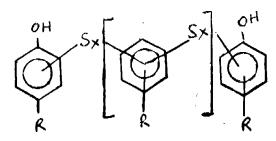
Inventors: ANDEREA PEDITTO, FRANCO FOSSATI, VINCENZO PETRILLO, PAOLO PERI, ELENA ANDRE-IEVNA IVANOVA, ALEKSANDR JAKOVLEVIC LEVIN, ALEKSANDR ALEXSANDROVIC FUFAEV AND VICTOR MAROVIC SHKOLNIKOV.

Application No. 1236/Cal/76 filed July 9, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims.

A process for the preparation of detergent additives for lubricating oils, in which an alkylphenolsulfide having the formula I.



wherein R represents a  $C_8$ — $C_{12}$  alkyl radical, x has an average value of between 1 and 2, and n is 0 or 1, is reacted with an oxygen bearing compound of an earth-alkali metal such as herein described and carbonated with carbon dioxide, the reaction water being then distilled up to refluxing of the solvent such as herein described and the reaction product is filtered and then separated from the reaction solvent, characterized in that the neutralization reaction between alkylphenol-sulfide and the oxygen bearing compound of the earth-alkali metal/or the carbonating reaction is carried out by adding to the mixture 0.1-20% by weight, referred to the weight of the final product, of a promoter comprising a mono- or polyfunctional organic nitrogen derivative, such as herein described the reaction being effected in a hydrocarbon solvent containing 6 to 12 carbon atoms.

CLASS 94A.

145348.

Int. Cl.-B02c 17/00.

EQUIPMENT FOR THE SYSTEMATIC RENEWAL OF BALL MILL BREAKING CHARGES.

Applicant: FIVES-CAIL BABCOCK, OF 7 RUE MONTALIVET 75383 PARIS CEDEX 08, FRANCE.

Inventor: FRANCIS DESRUMEAUX,

Application No. 1820/Cal/76 filed October 5, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims.

Equipment for the systematic renewal of a ball mill's charge, characterized by the fact that it consists of a material flowrate measuring device, which includes an integrating system that sends signals long intervals apart, the time spent between one signal and the next corresponding to the introduction of a predetermined tonnage of material into the mill, and a loading device which is controlled by said signals and drops into the mill a ball charge, the weight of which is equal to the weight loss of balls through wear in the period of time separating two successive signals.

CLASS 12D & 85G.

145349.

Int. Cl.-C21d 9/56.

FURNACES FOR HEAT TREATING METALLIC STRIP.

Applicant: BRITISH STEEL CORPORATION, OF 33 GROSVENOR PLACE, LONDON, S.W.1., ENGLAND.

Inventor: GEORGE JACKSON.

Application No. 174/Cal/77 filed February 7, 1977.

Convention date February 17, 1976/(06188/76) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims.

A furnace for continuously heat treating metallic strip comprising an entry table including a leading portion having a substantially plane upper surface and a trailing portion which inclines downwardly towards the base of a floation trough, the trough extending along substantially the full length of the heating zone of the furnace and including upwardly and outwardly inclined side walls, the furnace also comprising flow restricting means located above the upper surface of the leading portion of the entry table to define with the table surface a shallow slot sufficient to enable strip to enter the furnace.

CLASS 50B.

145350.

Int. Cl.-F24f 300.

AN AIR COOLER.

Applicant & Inventor: RAM NARAIN KHER, OF 17, CAMAC STREET, CALCUTTA-700017, INDIA.

Application No. 1138/Cal/77 filed July 25, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims.

A water distribution tray for use with an air cooler comprising a base plate having a plurality of series of holes or perforations, each of said series of holes or perforations being provided for each pad and disposed adjacent the side walls of said tray as described in parent patent application No. 2606/Cal/74 characterized in a depending member and a deflector or guide plate provided for each pad, said depending member disposed at an inclination with respect to the main axis of said tray, said guide or deflector plate depending from the underside of said tray and provided in association with said holes and such that water from said tray is guided to said pad, by said guide plate, said pad adapted to be held between said depending member and guide plate.

CLASS 95D & H.

145351.

Int. Cl.-F16b 2/20, B25c 11/00.

A HAND TOOL FOR PRIZING OPEN STAPLE PINS OR FOR PUNCHING PAPER OR THE LIKE, CUM CLIP.

Applicant & Inventor: CHINNAPPA ARJUNA RAJA, AT 224, P.S.P. STREET, RAJAPALAIYAM CITY 626117, TAMIL NADU, INDIA.

Application No. 29/Mas/77 filed February 5, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 12 Claims.

A hand tool for prizing open staple pins or for punching paper or the like, cum clip, comprising a pair of pivotally mounted levers or arms characterized in that one end of each of the said arms is provided with at least one element such as jaws, or punching stud and cooperating plate, according as the tool is required for prizing open staple pins or for punching paper, the said two levers or arms being spring loaded such that in the normal position the two ends of the arms provided with the said element are spaced or wide apart whilst the other free ends of the arms are close together to form a clip.

CLASS 155D.

145352.

Int. Cl.-B32b 31/00.

METHOD FOR THE MANUFACTURE OF A FLAT TEXTILE FABRIC ELEMENT AND A FLAT TEXTILE FABRIC ELEMENT MANUFACTURED THEREOF.

Applicant: STOTZ & CO. AG, OF 15, WALCHESTRASSE, CH-8006 ZURICH, SWITZERLAND.

Inventors: HANSJORG BACHTIGER AND KARIN ELL,

Application No. 1588/Cal/75 filed August 14, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 14 Claims, No drawings,

A method for the manufacture of a flat textile fabric element with varying degrees of stiffness in different areas, wherein a composition containing at least one substance capable of cross-linking such as herein described is applied to the flat fabric element and subjected to a treatment which effects cross-linking, characterized in that said composition is applied to the areas to be stiffened by means of a printing method and thereafter is subjected to said treatment which effects cross-linking.

CLASS 156D.

145353.

Int. Cl.-F04b 43/00.

PUMP INTENDED FOR PUMPING A LIQUID MEDIUM.

Applicant & Inventor: JAN EDVARD PERSSON, OF HENRIKSDALSRINGEN 17V, S-13100 NACKA, SWEDEN.

Application No. 194/Cal/76 filed February 3, 1976.

Appropriate office for opposition Proceedings (Rule 4,

Patents Rules, 1972) Patent Office, Calcutta.

#### 12 Claims.

A pump comprising a variable volume operating chamber arranged to cooperate by means of valves with a discharge pipe for the medium to be pumped, wherein the operating chamber comprising at least one elastomeric tubular pump

element arranged to be strained for alternate extension and contraction axially in order to effect pumping, and wherein said tubular pump element consists of an elastomeric basic compound with helical reinforcement filaments running in both directions with a pitch angle other than arccot  $\sqrt{2}$  (35.20), so that axial tensile extension of the pump element effects an overall alteration of the internal volume of the tubular pump element.

CLASS 27A.

145354.

Int. Cl.-B63b 35/00, 35/44.

FLOATING STRUCTURE.

Applicant: SINGLE BUOY MOORINGS, INC., AT FRIBOURG, 12, RUE ABBEBOVET, SWITZERLAND.

Inventor: WILLEM JAN VAN HEIJST.

Application No. 426/Cal/76 filed March 10, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Calcutta.

#### 4 Claims.

Floating structure with floats of which one by means of a rigid arm is hingedly coupled around a horizontal axis with another smaller float, which assembly of floats through a vertical tension loaded connection is coupled with an anchor, which structure can turn 360° around the axis of said connection, characterized in that the structure has two floats of which at least one is essentially below the water-level.

CLASS 39K & 84A & 108A.

145355.

Int. Cl.-C10i 3/00, C10j 3/48, C01b 31/18.

METHOD AND APPARATUS FOR CONTINUOUS GASIFICATION, OF SOLID AND/OR FLUID CARBON-CONTAINING AND/OR HYDROCARBON-CONTAINING SUBSTANCES IN MOLTEN IRON IN A REACTION VESSEL.

Applicant: EISENWERK-GESELLSCHAFT MAXIMII.LANSHUTTE MBH, OF 9458 SULZBACH-ROSENBERG, WEST GERMANY.

Inventors: HELMUT KNUPPEL, KARL BROTZMANN, HANS-GEORGE FASSBINDER, JOACHIM MIETZNER AND OTTO AMBROS.

Application No. 795/Cal/76 filed May 7, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 27 Claims.

Method of continuous gasification of solid and/or liquid carbon-containing and/or hydrocarbon-containing substances in a bath of molten iron in a reaction vessel, to produce a reaction gas mixture consisting substantially of carbon monoxide and hydrogen characterised in that the components for the reaction, on the one hand carbon-containing and/or hydrocarbon-containing substances such as herein described and on the other hand oxygen and oxygen-containing media such as herein described, are introduced into the bath of molten iron through one or more nozzles which are mounted in the vessel in a refractory lining below the surface level of the bath, and thereby wear away at an equal rate with the lining.

CLASS 47A & 139A.

145356.

Int. Cl.-C01b 31/10.

PROCESS FOR THE MANUFACTURE OF GRANULAR ACTIVATED CARBON FROM SUB-BITUMINOUS COAL LEACHED WITH DILUTE INORGANIC ACID.

Applicant: THE CARBORUNDUM COMPANY. AT 1625 BUFFALO AVENUE, NIAGARA FALLS, NIAGARA COUNTY, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventor: HARI NARASHIMHA MURTY.

Application No. 813/Cal/76 filed May 10, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims.

A process for making hard granular activated carbon having an abrasion number of not less than 70 a moisture content of 10 to 25% by weight and an ash content of not more than 5% by weight comprising; forming granules from sub-bituminous coal, treating the granules with a dilute aqueous solution of inorganic acid with an acid concentration sufficient to eliminate charring, washing off the acid, drylng the washed granules at least partially to a moisture content below 25 per cent by weight, mixing the dried granules with 0 per cent to 15 per cent by weight of a carbonaceous binder, reducing the dried granules to form fine powder, compressing the powder reducing the compressed powder to reform granules, devolatilizing the reformed granules, without charring, by directly heating to and at a temperature higher than the charring temperature in an oxygen-free atmosphere, and activating the devolatilized granules by heating to and at a temperature higher than the devolatilizing temperature in an atmosphere containing a gaseous activating agent such as herein described.

CLASS 139A.

145357.

Int. Cl.-C01b 31/08, C01b 31/14.

GRANULAR ACTIVATED CARBON MANUFACTURE FROM SUB-BITUMINOUS COAL MIXED WITH -CON CENTRATED INORGANIC ACID WITHOUT PITCH.

Applicant: THE CARBORUNDUM COMPANY, AT 1625 BUFFALO AVENUE, NIAGARA FALLS, NIAGARA COUNTY, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventor: HARI NARASHIMHA MURTY.

Application No. 1024/Cal/76 filed June 11, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 24 Claims.

A process for making granular activated carbon and comprising: forming granules from sub-bituminous coal having a moisture content of not more than 30% by weight; treating the granules by mixing with not less than 1% and not more than 10% by weight of concentrated inorganic acid such as herein described without the addition of a carbon-accous binder reducing by milling the treated granules to form powder having a moisture (including acid) content of not less than 10 and not more than 30% by weight; compressing the powder to form pellets; reducing the pellets to reform granules; divolatilizing the reformed granules by treating in an oxygen-free atmosphere to a temperature of 450°C at a rate of 300°C/hour; and activating the devolatized granules by heating to a temperature of 800 to 900°C in an atmosphere consisting of carrier gas such as herein described.

CLASS 198A.

145358.

Int. Cl.-B03b 3/00, B03d 3/00.

METHOD OF SEPARATION OF A MIXTURE OF MINERAL GRAINS IN AN AQUEOUS MEDIUM AND DEVICE FOR THIS METHOD.

Appllcant: CENTRALNY OSRODEK PROJEKTOWO-KONSTRUKEYJNY MASZYN CORNICZYCH "KOMAG", GLIWICE, PSZCZYNSKA STR. 37, POLAND,

Inventors: ANTONI JEDO, WACLAW JACHNA AND ADOLF SZCZESNY.

Application No. 1314/Cal/76 filed July 22, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims.

A method for separation of a mixture of mineral grains having different specific gravities comprising introducing a raw mixture of mineral grains with water tangentially at the outer wall of a trough with an initial velocity to produce circulation of the stream of the mixture at least near an upper edge of said outer wall, the mineral grains selectively flowing along spiral trajectories within the trough from the outer wall towards the central axis thereof in accordance with the specific gravities of the grains, supplying pulsating water into said trough to facilitate separating therein of the grains into light and heavy fractions, and discharging the separated light and heavy fractions separately in the region of the central axis in the trough.

CLASS 32E.

145359.

Int. Cl.-C08f 3/08, 15/04.

PROCESS FOR PREPARING CRYSTALLINE POLYMERS AND COPOLYMERS OF PROPYLENE.

Applicant: MONTEDISON S.P.A., OF 31, FORO BUON-APARTE, MILAN, ITALY.

Inventors: LUCIANO LUCIANI AND PIER CAMILLO BARBE.

Application No. 1573/Cal/76 filed August 26, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 Claims. No drawings.

Process for preparing crystalline polymers and copolymers of propylene by polymerization of propylene and of its mixtures with ethylene and/or alpha-olefins in liquid or gas phase, in presence or not of an inert hydrocarbon solvent, by means of a catalyst comprising a product of the reaction between:

- (a) metallorganic compound of Al, and
- (b) the reaction product of a halogenated Mg compound with a Ti compound and with an electron-donor compound

characterized in that the crude polymerization product obtained without removal of atactic polymer fraction, shows an isotacticity index ranging from 90 to 97 and a melt index from 0.5 to 30 g/10'.

CLASS 32F<sub>2</sub>b & 55E<sub>4</sub>.

145360.

Int. Cl.-C07d 99/04.

PROCESS FOR THE PRODUCTION OF NEW QUINU-CLIDINE COMPOUNDS.

Applicant: MUNDIPHARMA A.G., OF ST. ALBAN-VORSTADT 94, POSTFACH CH-4006, BASEL, SWITZER-LAND.

Inventors: SASSON COHEN AND ABRAHAM FISHER.

Application No. 2027/Cal/76 filed November 10, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims.

A process for the production of a spiro (1, 3-dioxolane-4, 3') quinuclidine of the general formula as shown in Fig. 2.

in which R<sub>1</sub> and R<sub>2</sub> which may be the same or different, each represents hydrogen or an alkyl or aryl group which comprises reacting 3-hydroxy-methyl-3-quinclidinol, with a carbonyl compound of formula R<sub>1</sub>R<sub>2</sub>CO.

CLASS 185E.

145361.

Int. Cl.-A23f 3/02.

PROCESS FOR PREPARING COLD WATER SOLUBLE TEA PRODUCT.

Applicant: NESTLE'S PRODUCTS LIMITED, OF NESTLE HOUSE, COLLINS AVENUE, NASSAU, BAHAMAS.

Inventor: SAEED AHMAD HUSAINI.

Application No. 310/Cal/77 filed March 2, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims. No drawings.

A process for producing cold water soluble tea tannins comprising:

- (a) chilling a hot water extract of tea leaves to a temperature sufficient to precipitate unoxidized tannins therefrom, such as hereinbefore defined, and separating the precipitated tannins from the supernatant;
- (b) forming a dispersion in a known manner of said unoxidized tannins in aqueous medium;
- (c) contacting said dispersion containing tannins with oxygen and an oxidation catalyst from 0.1 to 1% by weight of tannin solids to effect oxidative solubilization of said tannins at a temperature range such as herein described, and
- (d) separating the resultant in a known manner aqueous medium containing solubilized tannins from said catalyst.

CLASS 32Fsc.

145362.

Int. Cl.-C07f 9/40.

PROCESS FOR PREPARING ADDUCTS OF A SALT OF N-PHOSPHONOMETHYL-GLYCINE AND A CYCLIC ANHYDRIDE.

Applicant: MONSANTO COMPANY. OF 800 NORTH LINDBFRGH BOULEVARD, ST. LOUIS, MISSOURI 63166, UNITED STATES OF AMERICA.

Inventor: VAN RUSSELL GAERTNER.

Application No. 653/Cal/77 filed May 2, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

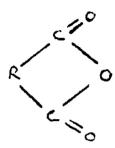
#### 6 Claims.

A process for preparing a compound of the formula I.

YO - C - CH<sub>2</sub> - N - CH<sub>2</sub> - R / OZ
$$\frac{1}{R} - C - OZ$$

wherein Y is selected from hydrogen, lower alkyl and alkali metal, each Z is selected from hydrogen and alkali metal, and R is selected from vinylene, methylvinylene, alkylene

ing a chain length of 2 to 3 carbon atoms between the valences and a total of up to 8 carbon atoms, the monorro derivatives of such vinylene and alkylene, phenylene, toxy-phenylene, 3-nitrophenylene, tolylene cyclohexenymethylcyclohexenylene, cycloalkylene of 4 to 6 carbon ons, dicarboxycycloalkylene of 4 to 6 ring carbon atoms, irboxy-benzoylphenylene, norbornenylene, norbornylidene, nethyl-pyrrolylidene, pyridylidene, picolylidene and thienyne, provided that the free valences on the cyclic radicals to be in ortho relationship with respect to the ring carbon ns, comprising reaction a di(alkali metal) salt of N-3-phonomethylglycine or a mono (alkali metal) salt of er alkyl N-phosphonomethylglycinate with an anhydride the formula II.



rein R has the same meaning as above, the pH of the tion mixture being maintained in the range of about 6 to

ASS 198B.

145363.

Cl.-C22b 1/00.

APROVEMENTS IN OR RELATING TO A PROCESS BENEFICIATION OF MAGNESITE MINERALS.

pplicant: COUNCIL OF SCIENTIFIC AND INDUSAL RESEARCH, RAFI MARG, NEW DELHI-1, INDIA.

iventors: DILIP KUMAR SENGUPTA, SURI RAMA BARAYA SASTRI AND KOTUR SRINIVASAN RASIMHAN.

pplication No. 62/Del/77 filed March 30, 1977.

ppropriate office for opposition Proceedings (Rule 4, -nts Rules, 1972) Patent Office, Delhi Branch.

## 6 Claims. No drawings.

n improved process for the beneficiation of magnesite erals by anionic flotation to effect separation of gangue rials by treating the slurry containing the ground minerwith depressants like sodium silicate and dextrin conning the slurry with collectors like aleic acid and hetic aliphatic alcohols and carrying out the flotation ations known perse, characterised in that the slurry bethe conditioning step is pretreated with salts of multivalmetals like ferric chloride, cupric nitrate or calcium ride.

SS 114D.

145364.

\*Cl.-C07g 17/00, C14c 3/10.

PROCESS FOR THE MANUFACTURE OF TANN-MATERIAL FROM LEAVES OF "AKHROT" TREE GLANS REGIA LINN.).

pplicant & Inventor: AMAR NATH VISHWAKARMA, SRI J. G. SRIVASTAVA, THE INDIAN KATTHA ARCH CENTRE, ISHWARI DAYAL BUILDINGS, GAUTAM BUDH MARG, LUCKNOW.

pplication No. 283/Del/77 filed September 30. 1977.

ppropriate office for opposition Proceedings (Rule 4, nts Rules, 1972) Patent Office, Delhi Branch.

## 2 Claims. No drawings.

process for the manufacture of tanning material out of rrot" leaves (Juglans regla Linn, fam. Juglandaceae) 267GI/78

wherein the air-dried leaves are shredded, extracted twice with water containing sodium sulphite, the said aqueous extract being filtered, boiled again for further concentration till the extract attains the consistency of syrup, the said syrupy extract being further dried preferably at 60°C, the dry extract powdered, sieved and packed.

CLASS 11D.

145365.

Int. Cl.-A01m 23/12.

REPEATING ANIMAL TRAP.

Applicant: WOODSTREAM CORPORATION AT LITTZ, PENNSYLVANIA 17543, UNITED STATES OF AMERICA.

Inventor: ANTHONY JOSEPH SOUZA.

Application No. 558/Cal/77 filed April 12, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims.

A repeating animal trap comprising housing means including portions defining a collection chamber for confining tapped animals, at least one entrance opening defined in said housing means; a trap means interposed in each entrance opening of said housing means such that an animal must pass through a trap means to reach said collection chamber, each of said trap means comprising side and top wall portions together defining an elongated passageway, one end of said passageway communicating with the exterior of said housing means through its associated entrance opening, means defining an exit opening communicating with said collection chamber at the opposite end of said passageway, a floor means extending along said passageway, said floor means including an upper surface, an entrance end portion and an exit end portion, transversely extending floor pivot means exit end portion, transversely extending floor pivot means rotatably supporting said floor means intermediate said entrance and exit end portions thereof, said floor means being movable about said floor pivot means from a first position in which said exit end portion of said floor means is higher than said entrance end portion thereof, to a second position in which said exit end portion is lower than said entrance end portion, said exit end portion of said floor means is end portion, said exit end portion of said floor means is higher than said entrance end portion thereof, to a second position in which said exit end portion is lower than said entrance end portion, said exit end portion of said floor means completely blocking access through said exit opening to said upper surface of said floor means when said floor means is in its first position, and said entrance opening being completely unblocked when said floor means is in its first position to thereby preclude return of already trapped animals from within said collection chamber to said the passage way while permitting additional animals to enter said passageway while permitting additional animals to enter said trap means, and access to said exit opening from said upper surface of said floor means being completely unblocked when said floor means is in its second position to permit an animal within said passageway to pass into said collection chamber, counterbalancing means secured to said entrance end portion of said floor means to normally blas said floor means to its first position, the weight of an animal passing through said entrance opening past said floor pivot means onto said exit end portion of said floor means moving said floor means to its second position, a door means including an inner surface, an upper end portion and a lower end portion, transversely extending door pivot means rotatably supporting said lower end portion of said door means immediately adjacent said entrance opening, said door means being movable about said door pivot means from a first position in which said inner surface of said door means generally rests, at least in part, on said upper surface of said entrance end portion of said floor means, to a second position in which said inner surface of said door means is moved upwardly away from said upper surface of said floor means, limit means engaging said door means prior to its reaching a vertical relationship when said door means is moved from its first to its second position, said entrance opening being completely unblocked when said door means is in its first position to permit an animal to enter said trap means, and said door means completely blocking said entrance opening when said door means is in

its second position to preclude escape of an animal within said passageway, the weight and inclination of said door means normally biasing said door means to its first position, said entrance end portion of said floor means underlying said door means and terminating at a point just short of said door pivot means, said door means being in its first position when said floor means is in its first position, and said door means being moved to its second position by said entrance end portion of said floor means as said floor means is moved to its second position.

CLASS 32C & E.

145366.

Int. Cl.-C08g 22/00, 43/00, C08h 11/00, C09k 1/02.

A PROCESS FOR PRODUCING SULFOHYDROXY-PROPYL ETHERS OF POLYGALACTOMANNAN GUM.

Applicant: CELANESE CORPORATION, AT 1211

AVENUE OF THE AMERICAS, NEW YORK, NEW YORK, U.S.A.

Inventor: RONALD NICHOLAS DEMARTINO.

Application No. 2013/Cal/76 filed November 9, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 12 Claims. No drawings.

A process for preparing sulfohydroxypropyl ethers of polygalactomannan gums which comprises containing solid polygalactomannan gum with 3-halo-2-hydroxypropanesulfonic acid and a stoichlometric excess of alkali metal hydroxide in a reaction medium comprising an aqueous solution of water-miscible solvent as herein defined, at a temperature between 10°C and 100°C for a reaction period sufficient to achieve a degree of substitution as herein defined by sulfohydroxyl-propyl ether groups between 0.01 and 3.0.

CLASS 32F<sub>2</sub>a & 40F.

145367.

Int. Cl.-C07b 11/00, C07c 79/00.

A PROCESS FOR NITRATING AROMATIC HYDROCARBONS.

Applicant & Inventor: NARAYAN APPA KUDAV, 11-HIRA COURT, 3RD FLOOR, LADY JAMSEDJI ROAD, MAHIM, BOMBAY-400016, MAHARASHTRA, INDIA.

Application No. 112/Bom/76 filed April 7, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

### 5 Claims. No drawings.

A process for nitrating aromatic hydrocarbons such as herein described which comprises nitrating the said aromatic hydrocarbons with urca nitrate in acidic media such as herein described.

CLASS 187E.

145368.

Int. Cl.-H04m 1/04, 1/21.

IMPROVEMENTS IN OR RELATING TO HOLDER FOR TELEPHONE OR LIKE TELECOMMUNICATION INSTRUMENT.

Applicant & Inventor: CHINNAPPA ARJUNA RAJA, AT NO. 224, P.S.P. STREET, RAJAPALAYAM CITY, 626117, TAMILNADU, INDIA.

Application No. 86/Mas/77 filed May 11, 1977.

Post-dated March 17, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 9 Claims.

An improved holder for a telephone or like telecommunication instrument comprising a base member, one or more

further members or walls provided on the said base meml at least one of the said further member being provided . means for resting the receiver part of the instrument further means being provided on the said holder to lock dialing/digital system and/or the telephone operating but or hook switch and/or the receiver part of the instrument

CLASS 201C.

1451

[PART III-SEC.

Int. Cl.-C02b 1/20, C09k 1/04, 3/00.

A COMPOSITION FOR TREATING WATER FLOCCULATE IMPURITIES CONTAINED THERE AND METHOD OF MAKING THE SAME.

Applicant: RHONE-POULENC INDUSTRIES, OF AVENUE MONTAIGNE, 75 PARIS (8TH), FRANCE.

Inventors: MARYVONNE THOMAS AND JEAN GROBOIS.

Application No. 1356/Cal/76 filed July 29, 1976.

Appropriate office for opposition Proceedings (Rule Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims. No drawings.

A composition for treating water to flocculate impuricontained therein and comprising aluminium hydroxyciride(s), sulphate anion and at least one organic anion as herein described capable of forming anionic or non-char complexes with aluminium in a neutral or non-acid mediin which the quantity of sulphate anion is from 0.05 to mole per gram-atom of aluminium, and the quantity organic anions is at least 0.01 mole per gram-atom of minium.

CLASS 32C & 144E<sub>0</sub>.

1453

Int. Cl.-C08h 13/00.

PROCESS FOR THE PREPARATION OF FLAME I TARDANT AND WATER RESISTANT BITUMEN.

Applicant: COUNCIL OF SCIENTIFIC AND IND TRIAL RESEARCH, RAFI MARG, NEW DELHI-1, INC

Inventors: SUBHAS RANJAN DUTTA CHOUDHU VADDADI SIVA BHASKAR RAO, AVINASH CHAND KHAZANCHI AND BANI PROSAD CHALIHA.

Application No. 1437/Cal/76 filed August 9, 1976.

Appropriate office for opposition Proceedings (Rule Patents Rules, 1972) Patent Office, Delhi Branch.

### 4 Claims. No drawings.

A process for the production of fire and water resis bitumen which consists in chlorination of bitumen, cha terized in that the chlorination of bitumen dissolved in organic solvent is carried out in the presence of a cata such as ferric chloride.

CLASS 156D & E.

145

Int. Cl.-F01k 27/02, B06b 1/18.

A MECHANICAL VIBRATOR DEVICE.

Applicant: COUNCIL OF SCIENTIFIC AND IND TRIAL RESEARCH, RAFI MARG, NEW DELHI-1, INI

Inventors: KALHAN KUMAR SANYAL AND SUBBARAO RAMCHANDRA.

Application No. 600/Cal/76 filed April 7, 1976.

Appropriate office for opposition Proceedings (Rule Patents Rules, 1972) Patent Office, Delhi Branch.

## 6 Claims.

A meihanical vibrator device comprises a set of 3-U-tubes, e being inverted interconnected with the others to form ee sealed vertical and three horizontal members with the inverted U-tube, horizontal member containing air or y inert gas and other two containing water, oil or like id, the joints of the tube near the junction of water and columns forming hot and cold cavities one of the vertical lumns forming an out-put column, water being used for cooling cavity while heat is applied to the hot cavity from external source, the variations in pressure and volume hot and cold cavities producing periodic pulsating motion the fluid in the out-put column to create a vibrator stion as the same reciprocates as a liquid piston.

\_ASS 123.

145372.

. CI.-C05f 11/00, 13/00.

A COMPOSITION FOR INCREASING YIELD OF JLSE.

Applicant: KAO SOAP CO., LTD., OF NO. 1-1, YABA-CHO, NIHONBASHI, CHUO-KU, TOKYO, PAN.

Inventors: SEIICHI MAEDA, KAN MORI AND TSUNEJKI TAKENO.

Application No. 2007/Cal/76 filed November 5, 1976.

Appropriate office for opposition Proceedings (Rule 4, tents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims. No drawings.

A composition for increasing the yield of pulse comprising: an effective amount of at least one component consisting a, sulfonate represented by the general formula: R¹-SO<sub>\*</sub>M crein R³ represents an alkyl or alkenyl group having 8 16 carbon atoms, an alkylaryl group having an alkyl sup of 8 to 16 carbon atoms or the residue of succinic acid ers represented by the general formula: CH<sub>3</sub>-COOR³

-CH-COOR\*

erein R<sup>2</sup> and R<sup>3</sup> represent an alkyl group having 3 to 16 bon atoms or an alkylaryl group having an alkyl group 6 to 18 carbon atoms, and M represents an organic or organic cation; and a sulfuric ester represented by the teral formula: R<sup>2</sup>-O-SO<sub>3</sub>M

erein R' represents an alkyl group having 8 to 16 carbon ms, and M is the same as defined above; and N-9 dimethynino-succinamide acid.

ASS 32E & 40B.

145373.

. Cl.-B01j 11/00, C08f 3/00.

PROCESS FOR PREPARING A NEW CATALYST FOR E POLYMERIZATION OF OLEFINS.

Applicant: MONTEDISON S.P.A., OF 31, FORO BUON-ARTE, MILAN, ITALY.

'nventors: UMBERTO GIANNINI, ENRICO ALBIZ-TI AND SANDRO PARODI.

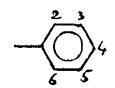
Application No. 1209/Cal/76 filed July 7, 1976.

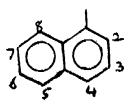
Appropriate office for opposition Proceedings (Rule 4, ients Rules, 1972) Patent Office, Calcutta.

#### 8 Claims.

Process for preparing a new catalyst for the polymerizan of olefins which comprises the reaction between at least compound of a transition metal selected from the group of mium, vanadium, zirconium, with a metallorganic commund of aluminium having a structure defined by the formula Al(OR") 3-n, in which n is 1 or 2. R are alkyl radicals

containing 1 to 12 carbon atoms and R" is a group of formula I or  $\Pi$ .





wherein in position 2 and 6 in formula I and in position 2, optionally also position 8 in formula II of the drawings there are present radicals at least one of which is capable of providing a steric hindrance higher than that of group -C<sub>2</sub>H<sub>2</sub>, the other radical being preferably an alkyl, such as methyl, ethyl, propyl and the like or an aryl such as phenyl.

CLASS 40B<sub>1</sub>.

145374.

Int. Cl.-F25b 39/02.

A METHOD AND INSTALLATION FOR GASSIFYING LIQUEFIED NATURAL GAS WHILE PRODUCING ENERGY.

Applicant: SNAMPROGETTI S.P.A., OF CORSO VENEZIA 16, MILAN, ITALY.

Inventors: BRUNELLO MACCHINI AND GUIDO CONTI.

Application No. 1629/Cal/76 filed September 6, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims.

An installation for gassifying liquefied natural gas white producing energy, characterised by comprising:

a first heat exchanger into which liquefied gas is fed, and wherein the liquefied natural gas is gassified, and from which the resulting natural gas is conveyed;

a closed loop gas turbine plant, including said first heat exchanger and a turbine, having a working gas medium circulating within said loop, wherein said medium is used to drive said turbine and wherein the waste heat of said turbine alone is used to gassify said liquefied natural gas by the indirect transfer of heat from said medium to said liquefied natural gas in said first heat exchanger; and

means for generating energy, which means develops waste heat, wherein said means is connected to said plant and wherein the waste heat from said means is passed in indirect heat exchanger with said working gas medium to transfer heat thereto.

CLASS 35C.

145375.

Int. Cl.-C04b 21/00.

PROCESS FOR THE MANUFACTURE OF LIGHT-WEIGHT, PARTICULATE AGGREGATES.

Applicant & Inventor: JOSE WALLS-MUYCELO, OF DEKOTA 222-100. MEXICO 18, D. F. MEXICO.

Application No. 1556/Cal/76 filed August 24, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 9 Claims. No drawings.

A process for the manufacture of a porous lightweight particulate aggregate which comprises the steps of

- (a) dissolving an alkali metal silicate in an amount of water sufficient to form a solution containing from 35% to 50% of total solids, and kneading into said solution an amount of from 0.1 to 50% by weight of the alkali metal silicate of finely divided silica, an amount of from 0.1 to 200% by weight of the alkali metal silicate of a finely divided alkaline earth metal silicate and suitable amounts of other additives to provide for modified and improved properties, in order to obtain a homogenous slurry;
- (b) reducing the thus obtained slurry to particles of a preselected size depending on the desired size of the finished aggregate;
- (c) heating the thus obtained particles to a temperature of from 110 to 700°C. for a period of time of from 0.1 seconds to 5 minutes to produce the necessary expansion of the particles through the blowing action of the water vapor released, with the formation of a large plurality of pores within each particles;
- (d) firing the expanded and relatively dried particles to a temperature of from 700 to 1500°C for a period of time of from 5 seconds to 1 minute to complete the expansion of the material and produce vitrification thereof; and
- (e) slowly cooling said fully expanded and vitrified particles to room temperature.

CLASS 85C & 116G.

145376.

Int. Cl.-F27 1/10.

DISPERSER FOR GAS ENTRAINED PARTICLES INTO A FLUID.

Applicant: THE BABCOCK & WILCOX COMPANY, AT 161 EAST 42ND STREET, NEW YORK, NEW YORK 10017, USA.

Inventor: WALTER CHRISTIAN LAPPLE.

Application No. 1962/Cal/76 filed October 28, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims.

A disperser including an upright member for use in a system for conveying gas entrained particulates comprising inner and outer tubular members having at least portions thereof concentrically spaced to form an annular channel therebetween, said inner member defining a central channel in which the gas entrained particulates are admitted, the inner member having means for causing acceleration of some of the gas entrained particulates, plate means closing the bottom of said annular channel, and an inlet for connection to means for supplying a pressurized fluid to the annular channel to disperse the gas entrained particulates exiting from said central channel.

CLASS 32A1.

145377.

Int, Cl.-C09b 29/08.

PROCESS FOR THE PREPARATION OF MONOAZO COMPOUNDS.

Applicant: HOECHST AKTIENGESELLSCHAFT, OF 6230 FRANKFURT/MAIN 80 FEDERAL REPUBLIC OF GERMANY

Inventors: KLAUS HUNGER, ERNST KLAPPERT AND KONRAD LOHE.

Application No. 277/Cal/77 filed February 25, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims.

PART III—SEC.

A process for the preparation of a compound of the formu.

in which R is methyl or ethyl, which comprises diazotizi a compound of the formula (2).

in which R is methyl or ethyl, and coupling it onto the copound of the formula (3).

CLASS 32Fra.

1453

Int. Cl.-C07c 82/22.

NOVEL METHOD FOR THE DENITROSATION ORGANIC NITROSAMINES.

Applicant: AMERICAN CYANAMID COMPANY, A WAYNE, NEW JERSEY, UNITED STATES OF AMERIC

Inventors: LAWRENCE JAMES ROSS AND GEORGANELLO CHIARELLO.

Application No. 664/Cal/77 filed May 4, 1977.

Appropriate office for opposition Proceedings (Rule Patents Rules, 1972) Patent Office, Calcutta.

9 Claims.

A method for the denitrosation of N-nitroso compoun of formula IV.

$$R''$$
 $R' - N - NO$ 

wherein R' represents alkyl, substituted alkyl, aryl or substituted aryl, R" represents alkyl, substituted alkyl or cycloalk

comprising reacting a N-nitroso compound of the above formula with an aliphatic or cycloaliphatic ketone or aliphatic aldehyde represented by formulae V. VI and VII.

wherein R<sub>•</sub> represents alkyl, aryl or substituted aryl, and Rb represents lower alkyl; and n is an integer of 3 to 7; in the presence of a strong acid such as hydrochloric or hydrobromic and an optionally inert organic solvent at atmospheric to superatmospheric pressures in the temperature range of from 20°C. to 120°C, for a period of time sufficient to essentially complete the reaction.

CLASS 80K & 107G.

145379

Int. Cl.-B60r 27/00.

A SEAL ADAPTED TO BE FITTED WITH A FILTER ASSEMBLY.

Applicant: PUROLATOR INDIA LTD., OF HAUZ KHAS, NEW DELHI, INDIA.

Inventor: MR. SURINDER KUMAR KAPOOR.

Application No. 2/Del/77 filed January 3, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

#### 4 Claims.

A seal adapted to be fitted with a filter assembly having an outer bowl with a filter insert held therein, an end cap member provided at one end of said bowl, said end cap member having a plurality of inlet holes and which are in flow communication with the inlet zone provided within said bowl through an inlet valve, a centre bush provided in said end cap member and being in flow communication with a central perforated tube disposed within said filter insert and such as to form an outlet for the filtered oil, the scal being adapted to be provided in association with said centre bush and to be removed therefrom by exerting a pressure on said seal in the outward direction, wherein the said seal consisting of a resilient plate is adapted to be disposed within said bowl and having a finger adapted to be extended beyond said bush.

CLASS 170B.

145380.

Int. Cl.-C11d 1/00,

PRODUCTION OF DETERGENT COMPOSITIONS.

Applicant: HINDUSTAN LEVER LIMITED, 165/166 BACKBAY RECLAMATION, BOMBAY-400020, MAHA-RASHTRA, INDIA.

Inventor: UNILEVER LIMITED.

Application No. 237/Bom/75 filed September 1, 1975.

Convention date September 6, 1974/(39030/74) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 22 Claims. No drawings.

An improved process for preparing a detergent composition having a detergent active compound and an alkali metal carbonate detergency builder, the improvement comprising first forming a detergent base powder made of the said detergent active compound and optionally with said alkali metal carbonate, separately forming granules of finely divided calcium carbonate having a surface area of 5 m<sup>2</sup>/g and a conventional binding agent which may comprise any remainder of the said alkali metal carbonate, and mixing the said detergent base powder and the granules so formed.

CLASS 49H.

145381.

Int. Cl.-A47j 27/00.

HEAT CONSERVING COOKING VESSEL.

Applicant & Inventor: MUSHAHID NAZEER AHMED, OF 193/2897, TAGORE NAGAR, VIKHROLI, BOMBAY-400083, MAHARASHTRA, INDIA.

Application No. 365/Bom/75 filed December 15, 1975.

Appropriate office for opposition Proceedings (Rule 4. Patents Rules, 1972) Patent Office, Bombay Branch.

#### 7 Claims

A heat conserving cooking vessel the open end whereof is covered or closed by a detachable lid and the side wall whereof and said lid are each double-walled to define a jacket which is packed with a heat insulating material suitable for use at normal cooking temperture.

CLASS 24A & E.

145382.

Int. Cl.-B60t 8/00.

IMPROVEMENTS IN INTERNAL SHOE-DRUM BRAKES OF THE DUO-SERVO TYPE FOR VEHICLES.

Applicnt: GIRLING LIMITED, OF KINGS ROAD, TYSELEY, BRIMINGHAM, 11, ENGLAND.

Inventor: ANDREWCHARLES WALDEN WRIGHT.

Application No. 1054/Cal/75 filed May 24, 1975.

Convention date June 5, 1974/(24861/74) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office. Calcutta.

## 12 Claims.

A duo-servo brake of the kind set forth for vehicles in which a housing fixed to a stationary part of the brake is located between the non-actuated shoe ends, the strut assembly is slidably guided in an open-ended through bore in the housing, the axis of which is chordal with the brake and from which opposite ends of the strut assembly project, and comprises threadably engaged members which are relatively rotatable to alter the effective length of the strut assembly to compensate for wear of the friction innings the length of the strut assembly being greater than its maximum transverse dimension, and a work journalled in the housing is adapted to be operated automatically by transmission means to affect relative rotation of the members and increase the effective length of the strut assembly, the transmission means being arranged to sense relative movement between the shoes when the shoes are separated in the application of the brake.

CLASS 130-I.

145383

Int. Cl.-C22b 3/00, 15/10.

METHOD OF EXTRACTING OF COPPER FROM AN AQUEOUS AMMONIACAL LEACH SOLUTION.

Applicants: METALLURGICAL PROCESSES LIMITED, AT TRUST CORPORATION OF BAHAMAS BUILDING, WEST BAY STREET, NASSAU, BAHAMAS, AND I.S.C. SMELTING LIMITED, OF 6ST. JAMES'S SQUARE, LONDON, SWIY 4LD, ENGLAND, CARRYING ON

BUSINESS TOGETHER IN THE BAHAMAS UNDER NAME AND STYLE OF METALLURGICAL DEVELOPMENT COMPANY, AT TRUST CORPORATION OF BAHAMAS BUILDING, WEST BAY STREET, NASSAU, BAHAMAS.

Inventor: WILLIAM HOPKIN.

Application No. 1581/Cal/75 filed August 13, 1974.

Convention date August 23, 1974/(37096/74) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims. No drawings.

A method of extracting copper from an aqueous animoniacal leach solution which is derived from the leaching of copper dross and which contains impuritycations, comprising contacting the leach solution with a copper-selective organic extractant as herein defined to take copper into the organic phase and then stripping the copper from the organic extractant into an aqueous phase, the organic extractant being washed with a dilute acid before stripping, wherein before the organic extractant contacts the dilute acid the concentration of copper in the organic extractant is reduced below a level at which poor phase separation occurs under acid conditions.

CLASS 63E.

145384.

Int. Cl.-H02k 9/00.

GENERATOR ROTOR OUTLETS FOR INCREASED VENTILATION.

Applicant: GENERAL ELECTRIC COMPANY, OF 1 RIVER ROAD, SCHENECTADY, NEW YORK, UNITED STATES OF AMERICA.

Inventor: WALTER BALL GILES.

Application No. 2353/Cal/75 filed December 17, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Calcutta.

#### 5 Claims.

A dynamoelectric machine comprising an air tight casing with a stator core, a rotor defining an air gap with the stator core, and means for recirculating and cooling the gas inise said casing:

a plurality of inlet means located along at least two axially spaced inlet zones extending circumferentially of said rotor for scoping in gas from the air gap upon a rotation of said rotor,

a plurality of outlet means located along at least one outlet zone extending circumferentially of said rotor for discharging gas into said air gap, an outlet zone being disposed between two axially-spaced inlet zones, characterized by the provision of passages which extend within the rotor to interconnect said inlet means with said outlet means to convey the gas scooped in by said inlet means through interior portions of said rotor to said outlet means for discharge therefrom, and further characterized by that each outlet means comprises two separate gas outlet ducts which are connected to two passages with each of said two passages being connected to a separate gas outlet duct.

CLASS 72A.

145385.

Int. Cl.-C06b 1/00.

BLASTING COMPOSITION CONTAINING CALCIUM NITRATE AND SULFUR AND A METHOD OF PREPARING THE SAME.

Applicant: IRECO CHEMICALS, OF SUITE 726 KENNECOTT BUILDING, SALT LAKE CITY, UTAH 84133 UNITED STATES OF AMERICA.

Inventor: DANIEL AARON WASSON.

Application No. 103/Cal/76 filed January 19, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, (1972) Patent Office, Calcutta.

#### 11 Claims. No drawings.

A blasting composition comprising: (a) inorganic oxidizer salt, selected from the group consisting of ammonium and alkali metal nitrates and perchlorates and ammonium and alkaline earth metal nitrates and perchlorates, such as, potassium nitrate, ammonium perchlorate, calcium perchlorate and potassium perchlorate, partially or completely dissolved in an aqueous solution, the total amount of water present in the composition being from 5% to 20% by weight including the water of crystallization of the salt; (b) solid fuels, such as finely divided, particulate aluminium, carbonaceous materials such as gilsonite or coal, and vegetable grins, such as wheat; (c) water-miscible liquid fuels, such as, methyl alcohol, ethylene glycol, formamide and analogos nitrogen-containing liquids; (d) water-immiscible liquid fuels, such as aliphatic, alicyclic and/or aromatic saturated or unsaturated liquid hydrocarbons, preferably No. 2 fuel oil; (e) a thickener, such as galactomaannin, preferably guar, gums, guar gums of reduced molecular weight, polyacrylamide and analogous synthetic substances, flours and starches; and (f) a sensitizer, such as a combination of at least 20% by weight of sulphur as as fuel.

CLASS 140B<sub>0</sub>.

145386.

Int. Cl.-C10g 19/00, 27/06.

PROCESS FOR THE CONVERSION OF MERCAPTAN COMPOUNDS INTO DISULFIDE COMPOUNDS IN A PETROLEUM DISTILLATE CHARGE STOCK CONTAINING OLEFINIC AND DIENIC COMPOUNDS.

Applicant: UOP INC., AT TEN UOP PLAZA-ALGON-QUIN AND MET. PROSPECT ROADS, DES PLAINES, ILLINOIS, U.S.A.

Inventors: DAVID HAROLD JOSEPH CARLSON AND PETER URBAN, JR.

Application No. 912/Cal/76 filed May 25, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 16 Claims. No drawings.

A process for the conversion of mercaptan compounds into disulfide compounds in a petroleum distillate charge stock containing mercaptan, olefinic and dienic compounds comprising the treatment of said petroleum distillate in an atmosphere of an oxygen-containing gas in a medium possessing a pH of from a pH of 8 to about a pH of 14 in the presence of a catalyst comprising a 4, 4', 4" 4" '-cobult phthalocyanine tetrasulfonate.

CLASS 154G.

145387.

Int. Cl.B41n 1/24.

IMPROVEMENTS IN AND RELATING TO DUPLICATING STENCILS.

Applicant: GESTETNER LIMITED, OF FAWLEY ROAD, TOTTENHAM, LONDON N17 9LT, ENGLAND.

Inventors: ALEXANDER SPENCER AND RICHARD SIBLEY HUGHES.

Application No. 1119/Cal/76 filed June 23, 1976.

Convention date June 25, 1975/(26981/75) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims. No drawings.

A duplicating stencil comprising a sheet of oleophobic stencil tissue carrying one one side an imageable ink-impervious coating penetrating into but not through the said tissue and having a smooth outer face, which in use is in contact with the surface receiving the duplicated image, and, on the other side, a second, relatively think ink-impervious coating covering the surface of the stencil tissue.

CLASS 157A, & A,

145388.

Int. Cl.-B61, 5/00.

ELECTRICALLY DRIVEN APPARATUS FOR OPERATING A RAILWAY POINTS.

Applicant: HOOGOVENS IJMUDEN B.V., OF WENCKEBACHSTRAAT, IJMUIDEN, THE NETHERLANDS.

Inventors: TOM ENSINK AND RIEKS ZONDERMAN.

Application No. 1150/Cal/76 filed June 29, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims.

Electrically driven apparatus for operating a railway point, having a slidable operating member for moving the tongues of the point between their two extreme positions, biassing means connected to the slidable operating member to hold it in whichever of the sald extreme positions the point is located, and electric motive means arranged to move a driving member in either of two opposed directions, characterized in that the driving member having a driving element which is located in an aperture in a lever connected to the slidable operating member so that the electric motive means, through the driving member and the lever can switch the point from either one of the extreme positions to the other the aperture being of a size and shape to permit relative movement of the lever and the driving element and there being provided control contact for the electric motive means, which control contact is actuated when the point has reached one of said extreme positions in a switching operation, so as to cause reversal of the motive means to bring the said driving member back to an intermediate position at which the said driving element thereof is located in such a position in said aperture that movement of the lever relative to the driving element is permitted if the point is forcibly moved by the wheels of a vehicle.

CLASS 39L.

145389.

Int. Cl.-B01j 11/32, 11/40, 11/42, 11/46, 11/54, 11/56.

A METHOD OF PREPARING AN OXYCHLORINATION CATALYST COMPOSITION.

Applicant: IMPERIAL CHEMICAL INDUSTRIES LIMITED, OF IMPERIAL CHEMICAL HOUSE, MILL-BANK, LONDON, S.W.1., ENGLAND.

Inventors: RUTH MARGARET LANE AND MARTYN HUGH STACEY.

Application No. 1924/Cal/76 filed October 23, 1976.

Convention date January 9, 1973/(1118/73) U.K.

Division of Application No. 2838/Cal/73 filed December 31, 1973.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims. No drawings.

A method of preparing an oxychlorination catalyst in which the hydrated oxides of magnesium and aluminium are precipitated from an aqueous solution of their salts, dried and calcined at a temperature in the range 300°C to 700°C to form a mixed oxide which is then treated with a solution of a salt of copper and finally again calcined at a temperature in the range of 300°C to 700°C.

CLASS 197.

145390.

Int. Cl.-A471 13/00.

PORTABLE APPARATUS FOR IREATING SURFACES.

Applicant: WHEELABRATOR-FRYF INC., OF LIBERTY LANE, HAMPTON, NEW HAMPSHIRE, UNITED STATES OF AMERICA.

Inventor: JOHN CHRISTIANUS BERGH.

Application No. 279/Cal/77 filed February 25, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 17 Claims.

A portable apparatus for the treatment of surfaces comprising a movable housing having a pair of corridors which extend at divergent angles from a common opening at one end, one of said corridors being a blast corridor and the other a rebound corridor, means for projecting abrasive particles through said blast corridor to said opening to impact surfaces confronting said opening for surface treatment, and whereby the abrasive particles rebound upon impact with said surface into and through said rebound corridor for recovery of abrasive particles, and means for returning abrasive particles passing through said rebound corridor to the projecting means.

CLASS 86E<sub>a</sub>.

145391.

Int. Cl.-H01j 7/00.

IMPROVEMENTS IN OR RELATING TO STARTERS FOR FLUORESCENT FITTINGS.

Applicant & Inventor: HAKIMUDDIN TAHER RASSI-WALA, 87, CHANDANWADI, OPP. SONAPUR CHURCH, SHIRIN MANZIL, BOMBAY-2, STATE OF MAHARASHTRA, INDIA.

Application No. 280/Bom/75 filed October 15, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 3 Claims.

A starter for use in the circuit of illuorescent tubes comprising a body made of toughened glass containing a conventional bi-metal strip bulb having electrodes projecting therefrom soldered or otherwise rigidly connected to the terminals on the metal cover of the said glass body characterised in that, (i) the inner wall of the glass body is conted with a uniformly spread layer of mercury and (ii) the terminals on the metal cover of the glass body being attached to the cover through strips of insulative material there between (iii) and the cover sealed to glass body by sealing cement.

CLASS 89 & 146B.

145392.

Int. Cl.-G01b 9/00, 11/00 G01c 7/00.

A DEVICE OR INSTRUMENT FOR TRACING PROFILES OF CAMS OR TAPPETS AND PLOTTING ANY PARAMETER WHICH IS A FUNCTION OF A CAM PROFILE.

Applicant: AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, OF P.O. POLYTECHNIC, AHMEDABAD 380015, GUJARAT STATE, INDIA.

Inventors: MAHESH CHANDRA PALIWAL AND ARVIND GANDALAL SHAH.

Application No. 334/Bom/75 filed November 24, 1975.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

## 10 Claims.

An instrument or device for comparing or tracing profiles of cams or tappets and plotting any parameter which is a function of a cam profile comprising a pair of parallel dis-

posed shafts; first shaft, called cam shaft, adapted to carry one or more cams or tappets at first end and carrying a tracing disc at the other end; means to rotate said cam shaft, second shaft, called follower shaft, carrying one or more followers, adapted to remain in constant contact with the cam profile during rotation of the cam shaft and a writing instrument at the other end of the follower shaft adapted to remain in constant contact with writing surface of the tracing disc, said follower shaft being freely rotatable in bearings with the movement of said follower when the latter is keyed thereto.

CLASS 68E1.

145393.

Int. Cl.-G05f 1/00.

IMPROVEMENTS IN OR RELATING TO VOLTAGE REGULATORS AND/OR STABILISERS.

Applicant: APPLIED ELECTRONICS LIMITED, OF A-5, APLAB HOUSE, WAGLE INDUSTRIAL ESTATE, THANA 400604, STATE OF MAHARASHTRA, INDIA.

Inventor: LEEDADHAR SAMBA SANNABHADTI.

Application No. 159/Bom/76 filed May 27 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 4 Claims.

A voltage regulator and/or stabiliser comprising of an autotransformer adapted to be supplied with the input current through a tap; a silicon controlled rectifier switch, connected in series with the said autotransformer, adapted to remain open under normal input or no-load conditions and connected to a conventional level detector, adapted to close the said Switch under condition of out-put voltage drop or input voltage fall; a filtering circuit, connected across the auto-transformer, consisting of at least two sets of an inductor, and a capacitor connected in series, adapted to filter the harmonic currents produced by the closing of the said switch during output voltage drop or input voltage fall; an output choke connected across the output voltage, adapted to buck the input voltage together with the auto-transformer under high input voltage or no-load conditions; the arrangement being such that, when the output voltage tends to drop either because of load or because of a fall in the input voltage, the level detector, closes the Switch 'S' to produce a voltage across the autotransformer and boost the input voltage to obtain a rated output voltage.

CLASS 5A & D.

145394.

Int. Cl.-A01b 33/00.

MULTIPURPOSE TILLAGE IMPLEMENT.

Applicant & Inventor: SHRIDHAR ZAMAJI THAKARE, BLOCK NO. 7. LELEWADI CHAL. HINDINAGAR, WARDHA, MAHARASHTRA STATE, INDIA.

Application No. 247/Bom/76 filed July 22, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 1 Claims.

Multipurpose tillage implement comprising main longitudinal beam having a yoke for harnessing bullocks, the said beam being provided with a longitudinally running screw over which there runs a box-nut two arms are connected to the said box nut, the said screw moves freely in a distally located fixed housing while the proximal end of the said screw is rotated with the help of a handle having a box spanner such that the free ends of said two arms carrying set of cultivation implements, can be brought closer together or taken apart to adjust the distance to suit width of crop.

CLASS 69B & D 133B.

145395.

Int. Cl.-H01h 83/02, 71/24.

A DEVICE FOR SWITCHING OFF A THREE PHASE ELECTRIC MOTOR INSTANTANEOUSLY WHEN ONE OR TWO PHASES FAIL.

Applicant & Inventor: MANUYANKODE NAGARAJA-JAH DEVI PRASAD. OF KAMALA MANDIRAM, P.O. MUTTIL, SOUTH WYNAD, KERALA STATE, INDIA.

Application No. 149/Mas/76 file August 5, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

## 23 Claims.

A device for switching off a three phase electric motor instantaneously when one or two phases fail comprising three electromagnetic coils each connectable in series with each of the phases of a three phase electric motor, means for mounting the electromagnetic coils, three magnetic cores each being fixedly mounted at one end of each of the electromagnetic coils, a swinging arm assembly, means for mounting it in front of the said magnetic cores, three magnetic weights, movably suspended between the magnetic cores and the swinging arms assembly, a relay circuit consisting of a movable contact point and a fixed contact point, said movable contact and fixed contact points being adapted to close or open the connection to the 'No Volt' coil of the three phase electric motor starter and means for limiting the movement of the movable contact point.

CLASS 176F.

145396.

Int. Cl.-F22n 1/02, 1/28.

IMPROVEMENTS IN OR RELATING TO STEAM GENERATORS.

Applicant & Inventor: THIRUVENGADAM KANAKADAS SRINIVASAN, C/O. SREE VARAMAHALAKSHMI RAMANUJA ENGINEERING WORKS. 7, PLATFORM ROD, SESHADRIPURAM, BANGALORE-560020, KARNATAKA STATE, INDIA.

Application No. 233/Mas/76 filed December 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 9 Claims.

An improved steam generator comprising a water heating vessel or container provided with means for controlling the inflow of water through a pipe line, an outer jacket enclosing the said container and having means to heat the said container, and an outlet for steam issuing from the container, and a further jacket having a water inlet connected to the said container near the lower portion thereof, and encircling the aforesaid outer jacket, and wherein the further jacket is also connected to the said outler for steam.

CLASS 146B.

145397.

Int. Cl.-B43k 24/12, B43l 13/04,

A PERPECTIVE DRAFTER.

Applicant: NATIONAL INSTITUTE OF DESIGN, AT 11-A, ROUSE AVENUE, NEW DELHI, INDIA.

Inventor: NIMESH BACHUBHAI BHATT.

Application No. 779/Cal/76 filed May 4, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Delhi Branch.

## 5 Claims.

A perpective drafter for providing a drawing of an object in perspective view comprising an elongate member having a guide slot therein, sliding means such as rollers provided at either ends thereof for allowing a sliding movement of said member, a steering mechanism for said member for steering the latter, said steering mechanism having a wheel or roller and which can be disposed in a parallel or angular relationship to said sliding means by said steering mechanism, and a scale rotatably held to said member.

CLASS 98E.

145398.

Int. Cl.-F28d 3/04.

FLUID BED HEAT EDCHANGER WITH PARTICULATE SOLIDS EROSION SHIELD.

Applicant: DORR-OLIVER INCORPORATED, OF 77 HAVEMEYER LANE, STAMFORD, CONNECTICUT 06904, UNITED STATES OF AMERICA.

Inventors: ANDREW BEAUMONT STEEVER AND WALFRED WILHELM JUKKOLA.

Application No. 892/Cal/76 filed May 22, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims.

A fluid bed reactor comprising a reaction chamber, a windbox separated from said reaction chamber by a constriction plate, tuyores mounted in said constriction plate and extending upwardly therefrom into said reaction chamber so as to provide tuyere ports for fluidizing gases at a level substantially above said constriction plate, a bed of particulate solids subject to fluidization on said constriction plate, a plurality of heat exchanger coils comprising vertically oriented runs of rubing serially joined by upper and lower return bends, said vertical runs of tubing being located in connect with said bed of particulate solids for heat exchange with said particulate solids in the fluidized state, said lower return bends being positioned in a layer of static or quiescent particulate solids at said bed located in a region between the upper surface of said constriction plate and the level in said bed at which fluidizing gases are introduced through said tuyere ports, whereby said lower return bends are protected by said static solids layer from the uighly erosive conditions which prevail in the region in which said particulate solids are in the fluidized state.

## CLASS 32E.

145399.

Int. Cl.-C08g 17/00.

APPARATUS AND PROCESS FOR THE PREPARATION OF POLYESTERS.

Applicant: RHONE-POULENC INDUSTRIES, OF 22, AVENUE MONTAIGNE, PARIS 8E, FRANCE.

Inventor: YVES BONIN AND JACQUES BREYSSE.

Application No. 333/Cal/76 filed February 25, 1976.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 16 Claims,

Process for the discontinuous preparation of a polyester which comprises polycondensing the reactants required for preparing the polyester in an apparatus which comprises a jacket possessing means for introducing the reactants and means for withdrawing the polyester obtained, the said jacket possessing a lower zone provided with means for the introduction of a gas phase, an upper zone provided with means for the removal of a vapour phase, and, between the said zones, a middle zone which comprises at least one substantially vertical externally heated tube which connects the lower zone to the upper zone and at least one vertical pipeline which connects the upper zone to the lower zone, the means for the introduction of the gas phase being such that gas-containing liquid passes up the tube enabling essentially gas-free liquid to pass down the pipeline.

# CORRECTION OF CLERICAL ERRORS UNDER SECTION 78 (3)

(1)

The title of the invention in the application and specification and also the opening description in the specification of specific of application for Patent No. 139555 (earlier numbered as 2484/Cal/73) was made by Elda AG, the acceptance of the complete specification of which was notified in Part III, Section 2 of the Gazette of India dated the 3rd July, 1976 has been corrected to read as "A method of producing corrugated cardboard sheet and corrugated cardboard sheet obtained therefrom," under sub-section (3) or Section 78 of the Patents Act, 1970.

(2

The title of the invention in the application and specification and also the opening description in the specification of patent application No. 141864 (earlier numbered as 142/Cal/74) made by Bayer Aktiengesellschaft, the acceptance of the complete specification of which was notified in Part III. Section 2 of the Gazette of India dated the 30th April. 1977 has been corrected to read as "Process and apparatus for the remote transmission and indication of electrical measured values in electrolysis cells", under Section 78(3) of the Patents Act, 1970.

#### PRINTED SPECIFICATION PUBLISHED

A limited number of printed copies of the undernoted specifications are available for sale from the Officer-in-Charge, Government of India Central Book Depot, 8, Hastings Street, Calcutta, at two rupees per copy:

| Diversity of the fire    | apees per copy. |
|--------------------------|-----------------|
|                          | (1)             |
| 133659.                  | <b>(A.</b> )    |
| 135137.                  | (2)             |
|                          | (3)             |
| 113616. 131385.          |                 |
| 120799. 129846.          | (4)             |
| 120777. 127040.          | (5)             |
| 132849.                  | (-,             |
| 10/202 12/505            | (6)             |
| 126393. 134525.          | (7)             |
| 133847. 133850.          | (7)             |
|                          | (8)             |
| 133662. 134833.          |                 |
| 05045 40455 40555        | (9)             |
| 95317. 103372. 107827, 1 |                 |
| 86686.                   | (10)            |
|                          | (11)            |
| 134508.                  |                 |
|                          | (12)            |
| 86391, 117449, 137041.   | (40)            |
|                          | (13)            |

108816, 109415, 109922,

#### PATENTS SEALED

142624 142829 142830 143301 143303 143304 143193 143197 143212 143275 143291 143399 143422 143438 143451 143472 143473 143530 143549 143550

#### AMENDMENT PROCEEDINGS UNDER SECTION 57.

#### (1)

Notice is hereby given that Sir W. G. Armstrong Whitworth & Company (Engineers) Limited, of Aberdeen Avenue, Trading Estate, Slough, Berkshire, SLI 4HG, England, a British Company, have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for patent No. 143574 for "Improved compression ignition internal combustion engine". The amendments are by way of correction so as to describe and ascertain the invention move correctly and precisely. The application for amendment and the proposed amendments can be inspected free of charge at the Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification, at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall left within one month from the date of gling the said notice.

#### (2)

The amendments proposed by Emhart (U.K.) Limited in respect of patent application No. 143113 as advertised in Part III, Section 2, of the Gazette of India dated the 20th May, 1978 have been allowed.

# PATENTS DEEMED TO BE ENDORSED WITH THE WORDS "LICENCES OF RIGHT"

The following patents are deemed to have been endorsed with the words "Licences of right" under Section 87 of the Patents Act. 1970. The dates shown in the crescent brackets are the dates of the patents:—

| No.                      | Title of the invention  |
|--------------------------|---|
| 79 <b>9</b> 86 (20.4.72) | Process for the preparation of 1, 8-napthyridines.  |
| 82217 (20.4.12)          | Method for production of new straphylo-<br>coccal antigen products.   |
| 90980 (20.4.72)          | A method for production of sulfomethyl polymyxins.  |
| 91938 (20.4.72           | <ol> <li>A process for the continuous lixiviation<br/>of disintegated material.</li> </ol>                                    |
| 93998 (20.4.12)          | Process for preparing acctoxymethyl benzy lpcnicillinate.   |
| 104163 (20.4.72          | Method of preparing composition containing sulphaquinoxalin and derivatives.  |
| 112602 (20.4.12          | <ol> <li>Method for producing vaccine again<br/>rubrella.</li> </ol>  |
| 113630 (20.4.72          | <ol> <li>Process technique for the hydrogenation<br/>of pyrone derivatives.</li> </ol>  |
| 133367 (27.10.7          | <ol> <li>Improvements in or relating to Luminis-<br/>cont material phosphor for use in fluoros-<br/>cent tubes.</li> </ol>    |
| 134377 (24.1.72          | <ol> <li>Improvements in or relating to the preparation of pellets containing carbonate and carbonaceous material.</li> </ol> |
| 134378 (24.1.72          | ) Improvements in or relating to the pre-   |

carbonaceous material.

135340 (20.4.72) Process for the preparation of validamycine

135893 (5.5.72) Process for preparing oxo compounds.

137772 (9,1,73)

paration of pellets containing carbonate and

A process for recovery of alkali from aque-

ous solution containing carbonates, hydro-

xides phosphates, silicates and alumunates.

C, D, E and F and validoxylamine.

#### RENEWAL FEES PAID

#### CESSATION OF PATENTS

103979 103980 103981 103982 113835 113861 113875 113878 113888 113889 113890 113893 113904 113915 113916 113917 113918 113937 113941 113944 113951 113963 113979 113980 114034 114042 114052 114055 114072 114078 114084 114120 114129 114141 114152 114164 114681 114956 123005 123006 125207 141297

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911:—

The date shown in each entry is the Jate of registration of design included in the entry.

- Class 1. No. 146261. Digitoko India, Advani Market, 15-B, Outside Delhi Darwaja, Ahmedabad-380001, Gujarat State, India, an Indian Partnership Firm. "Time piece". November 26, 1977.
- Class 1. No. 146270. Raviraj Gupta, Murari Mohan Ghose, Mrs. Brij Kumari Gupta and Mrs. Shirani Mukherjee, all Indian Nationals trading as National Metal Craft of 4634, Ajmeri Gate Delhi-6, India. "Clamp". November 29, 1977.
- Class 1. No. 146271. Tata Engineering and Locomotive Company Limited, of Bombay House, 24, Homi Mody Street, Fort, Bombay-400023, Maharashtra, India, an Indian Company. "A solid state controller". November 30, 1977.
- Class 1. No. 146273. S. V. Sehgal Auto Parts, C-6/10, Krishan Nagar, Delhi-110051, India, an Indian Partnership Firm. "Scooter beading". December 1, 1977.
- Class 1. No. 146274. Veb Polygraph Leipzig Kombinat fur polygraphische Maschinen and Ausrustungen, 705 Leipbzig, Zweinaundorfer Strassee 59, German Democratic Republic, a National Corporation organised under the laws of German Democratic Republic. "Printing machine". December 1, 1977.

- Class 1. No. 146281. Abdul Majid, trading as Handicrafts (India), Idgah Road, Moradabad, Uttar Pradesh, India, an Indian National, "Censer". December 6, 1977.
- Class 1, No. 146356. B. Chawla & Sons, 308/4, Shahzada Bagh, Old Rohtak Road, Delhi-35, an Indian Partnership Concern. "Mirror". December 17, 1977.
- Class 3. No. 146230. Bombay Burma Plastics, 119, Adhyaru Industrial Estate, Sunmill Compound, Sunmill Road, Lower Parel Bombay-400013, Maharashtra, India, an Indian Partnership Firm. "Water bottle". November 17, 1977.
- Class 3. No. 146244. Geoffrey Manuers & Company Limited, A company incorporated in India, Magent House, Narottam Morarjee Marg, Ballard Estate, Bombay-400038, State of Maharashtra, India. "Bottles". November 21, 1977.
- Class 3. No. 146251. Bombay Burma Plastics, 119, Adhyaru Industrial Estate, Sunmill Compound, Sunmill Road, Lower Parel, Bombay-400013, Maharashtra, an Indian Partnership Firm. "Puzzle game". November 24, 1977.
- Class 3. No. 146251. Bombay Burma Plastics, 119, Adhyaru Darshan, 5, Vallabh Nagar Society, 5th Floor, Juhu Scheme, Vile Parle (West), Bombay-400056, Maharashtra State, India, an Indian Patnership Firm, "Slip box with ball pen and calendar". November 26, 1977.
- Class 3. No. 146280. Tata Engineering and Locomotive Company Limited, of Bombay House, 24, Homi

- Mody Street, Fort, Bombay-400023, Maharashtra India, au Indian Company. "A plug-in-unit timer". December 2, 1977.
- Class 3. No. 146334. Bihani Industries, of 30-B, Industrial Colony, Naini, Allahabad-211008, Uttar Pradesh, India, An Indian sole proprietory company. "A torch". December 12, 1977.
- Class 3. No. 146357. National Institute of Design, Paldi, Ahmedabad-380007, Gujarat State, India, an Indian Registered Co-operative Society. "Folding stool". December 17, 1977.
- Class 3. Nos. 146374, 146375 & 146376. Minni Trading Corporation, 5B, Kanchan Villa, Goraswadi, Malad, Bombay-400064, Maharashtra State, India, an Indian Partnership Firm "Bottle pourer plug". December 20, 1977.
- Class 3. No. 146389. Venus Plastics, L-54, Laxman Puri Chowk, Multani Dhanda, Pahar Ganj, New Delhi-110055, India. "Toy". December 23, 1977.
- Class 4. No. 146237. Geoffrey Manners & Company Limited, a Company incorporated in India, Magnet House, Narottam Morarjee Marg, Ballard Estate, Bombay-400038, State of Maharashtra, India. "Hottles". November 18, 1977.
- Class 4. No. 146283. Shyamal Kishore Goenka, an Indian National, Cantonment Road, Cuttack, Orissa, India. "Bottle". December 6, 1977.

#### S. VEDARAMAN

Controller-General of Patents, Designs and Trade Marks.

|  |  | , |  |
|--|--|---|--|
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |